

At the appropriate place in title II, insert the following:

**SEC. \_\_\_\_ . ADVANCED BATTLE MANAGEMENT SYSTEM RESEARCH AND DEVELOPMENT.**

(a) RESEARCH AND DEVELOPMENT.—

(1) IN GENERAL.—The Secretary of the Air Force shall continue research and development of the Advanced Battle Management System.

(2) ELEMENTS.—Research and development under paragraph (1) shall include the following:

(A) Identifying necessary associated aircraft, technological platforms, and necessary associated units.

(B) Identifying regional ecosystems with advantageous supporting base structures and academic institutions that would complement the central location.

(C) Assessing the feasibility and advisability of establishing an Advanced Battle Management System center of excellence to be the processing, exploitation, and dissemination hub of development for the system and associated platforms and aircraft.

(b) REPORT.—

(1) IN GENERAL.—Not later than 180 days after the date of the enactment of this Act, the Secretary of the Air Force shall submit to the congressional defense committees a report on the Advanced Battle Management System.

(2) CONTENTS.—The report submitted under paragraph (1) shall include the following:

(A) A timeline defining the breadth of the Advanced Battle Management System.

(B) An assessment of the feasibility and advisability of establishing of an Advanced Battle Management System center of excellence as described in subsection (a)(2)(C).

**SA 3902.** Mr. WARNOCK submitted an amendment intended to be proposed to amendment SA 3867 submitted by Mr. REED and intended to be proposed to the bill H.R. 4350, to authorize appropriations for fiscal year 2022 for military activities of the Department of Defense, for military construction, and for defense activities of the Department of Energy, to prescribe military personnel strengths for such fiscal year, and for other purposes; which was ordered to lie on the table; as follows:

At the end of subtitle E of title III, add the following:

**SEC. 376. MODIFICATION AND EXTENSION OF AUTHORIZATION OF USE OF WORKING CAPITAL FUNDS FOR UNSPECIFIED MINOR MILITARY CONSTRUCTION PROJECTS RELATED TO REVITALIZATION AND RECAPITALIZATION OF DEFENSE INDUSTRIAL BASE FACILITIES.**

Section 2208(u) of title 10, United States Code, is amended—

(1) in paragraph (2)(B), by striking “specified in subsection (a)(2)” and all that follows through the period at the end and inserting “shall be \$20,000,000 instead of any dollar limitation specified in section 2805 of this title.”; and

(2) by striking paragraph (4).

**SA 3903.** Mr. WARNOCK submitted an amendment intended to be proposed to amendment SA 3867 submitted by Mr. REED and intended to be proposed to the bill H.R. 4350, to authorize appropriations for fiscal year 2022 for military activities of the Department of Defense, for military construction, and for defense activities of the Department of Energy, to prescribe military

personnel strengths for such fiscal year, and for other purposes; which was ordered to lie on the table; as follows:

In division A, strike section 1601 and insert the following:

**SEC. 1601. MATTERS CONCERNING CYBER PERSONNEL REQUIREMENTS.**

(a) IN GENERAL.—The Secretary of Defense shall—

(1) determine the overall workforce requirement of the Department of Defense for cyber operation, information operation, and software engineering military personnel (across the active and reserve components of the Armed Forces (other than the Coast Guard)) and civilian personnel, and in doing so shall—

(A) consider personnel in positions securing the Department of Defense Information Network and associated enterprise information technology, defense agencies and field activities, and combatant commands, including current billets primarily associated with the information environment and cyberspace domain and projected future billets;

(B) consider the mix between military and civilian personnel, active and reserve components, and the use of the National Guard;

(C) develop a workforce development plan that covers accessions, training, and education; and

(D) consider such other elements as the Secretary determines appropriate;

(2) assess current and future general information warfare, software, and cyber education curriculum and requirements for military and civilian personnel, including—

(A) acquisition personnel;

(B) accessions and recruits to the military services;

(C) cadets and midshipmen at the military service academies and enrolled in the Senior Reserve Officers’ Training Corps;

(D) information environment, software engineering, and cyberspace military and civilian personnel; and

(E) non-information environment and cyberspace military and civilian personnel;

(3) identify appropriate locations for information warfare, software engineering, and cyber education for military and civilian personnel, including—

(A) the military service academies;

(B) the educational institutions described in section 2151(b) of title 10, United States Code;

(C) the Air Force Institute of Technology;

(D) the National Defense University;

(E) the Joint Special Operations University;

(F) any other military educational institution of the Department specified by the Secretary for purposes of this section;

(G) the Cyber Centers of Academic Excellence certified jointly by the National Security Agency and the Department of Homeland Security;

(H) potential future educational institutions of the Federal Government, including an assessment, in consultation with the Secretary of Homeland Security and the National Cyber Director, of the feasibility and advisability of a National Cyber Academy or similar institute created for the purpose of educating and training civilian and military personnel for service in cyber, information, and related fields throughout the Federal Government; and

(I) potential colleges, universities, and research institutes located in proximity to key military installations or with close ties to military installations who have programs focused on information warfare, software engineering, and cybersecurity;

(4) identify pathways to workforce growth, including—

(A) any current hiring practices or restrictions that constrain workforce growth or retention;

(B) areas where partnership with State and local educational agencies focused on elementary or secondary education can boost workforce in an area, especially in rural schools and schools that receive funds under part A of title I of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 6301 et seq.);

(C) incentive and policy options to bring qualified individuals to the regions where the jobs are currently;

(D) authorities and programs at the Department of Labor that could be used to educate, retrain, or incentivize individuals to pursue these fields of study; and

(E) options for scholarships and internships to grow a workforce pipeline; and

(5) determine—

(A) whether the cyberspace domain, software engineering, and information warfare mission requires a graduate-level professional military education college on par with and distinct from the war colleges for the Army, Navy, and Air Force in effect on the day before the date of the enactment of this Act;

(B) whether such a college should be joint; and

(C) where it should be located.

(b) REPORT REQUIRED.—Not later than November 1, 2022, the Secretary shall provide the Committee on Armed Services of the Senate and the Committee on Armed Services of the House of Representatives a briefing and, not later than Jan 1, 2023, the Secretary shall submit to such committees a report on—

(1) the findings of the Secretary in carrying out subsection (a);

(2) an implementation plan to achieve future information warfare and cyber education requirements at appropriate locations;

(3) such recommendations as the Secretary may have for personnel needs in information warfare and the cyberspace domain; and

(4) such legislative or administrative action as the Secretary identifies as necessary to effectively meet cyber personnel requirements.

(c) EDUCATION DEFINED.—The term “education” includes formal education requirements, such as degrees and certification in targeted subject areas, but also general training, including—

(1) reskilling;

(2) knowledge, skills, and abilities; and

(3) nonacademic professional development.

**SA 3904.** Mr. WARNOCK (for himself, Mrs. BLACKBURN, and Mr. MORAN) submitted an amendment intended to be proposed to amendment SA 3867 submitted by Mr. REED and intended to be proposed to the bill H.R. 4350, to authorize appropriations for fiscal year 2022 for military activities of the Department of Defense, for military construction, and for defense activities of the Department of Energy, to prescribe military personnel strengths for such fiscal year, and for other purposes; which was ordered to lie on the table; as follows:

At the end of subtitle F of title V, add the following:

**SEC. 583. STUDY ON EMPLOYMENT OF MILITARY SPOUSES.**

(a) STUDY.—

(1) IN GENERAL.—The Secretary of Defense shall conduct a study to identify employment barriers affecting military spouses.

(2) ELEMENTS.—The study conducted under paragraph (1) shall determine the following:

(A) The rate or prevalence of military spouses who are currently employed and whether such military spouses have children.

(B) The rate or prevalence of military spouses who are underemployed.

(C) In connection with subparagraph (B), whether a military spouse would have taken a different position of employment if the military spouse were not impacted by the spouse who is a member of the Armed Forces.

(D) The rate or prevalence of military spouses who, due to military affiliation, have experienced discrimination by civilian employers, including loss of employment, denial of a promotion, and difficulty in being hired.

(E) Any other barriers of entry into the local workforce for military spouses, including—

- (i) state licensure requirements;
- (ii) availability of childcare;
- (iii) access to broadband;
- (iv) job availability in military communities; and
- (v) access to housing.

(b) **REPORT.**—Not later than 1 year after the date of the enactment of this section, the Secretary of Defense shall submit to the congressional defense committees a report containing the results of the study conducted under this section, including any policy recommendations to address employment barriers identified by the study.

(c) **DEFINITIONS.**—In this section:

(1) **MILITARY SPOUSE.**—The term “military spouse” means the spouse of a member of the Armed Forces serving on active duty.

(2) **CONGRESSIONAL DEFENSE COMMITTEES.**—The term “congressional defense committees” has the meaning given that term in section 101(a)(16) of title 10, United States Code.

**SA 3905.** Mr. WARNOCK submitted an amendment intended to be proposed to amendment SA 3867 submitted by Mr. REED and intended to be proposed to the bill H.R. 4350, to authorize appropriations for fiscal year 2022 for military activities of the Department of Defense, for military construction, and for defense activities of the Department of Energy, to prescribe military personnel strengths for such fiscal year, and for other purposes; which was ordered to lie on the table; as follows:

At the end of subtitle C of title VIII, add the following:

**SEC. 838. REQUIREMENT TO PROVIDE PHOTOVOLTAIC DEVICES FROM UNITED STATES SOURCES.**

(a) **CONTRACT REQUIREMENT.**—The Secretary of Defense shall ensure that each covered contract includes a provision requiring that any photovoltaic device installed under the contract be manufactured in the United States substantially all from articles, materials, or supplies mined, produced, or manufactured in the United States, unless the head of the department or independent establishment concerned determines, on a case-by-case basis, that the inclusion of such requirement is inconsistent with the public interest or involves unreasonable costs, subject to exceptions provided in the Trade Agreements Act of 1979 (19 U.S.C. 2501 et seq.) or otherwise provided by law.

(b) **DEFINITIONS.**—In this section:

(1) **COVERED CONTRACT.**—The term “covered contract” means a contract awarded by the Department of Defense that provides for a photovoltaic device to be—

(A) installed inside the United States on Department of Defense property or in a facility owned by the Department of Defense; or

(B) reserved for the exclusive or substantial use of the Department of Defense in the United States.

(2) **PHOTOVOLTAIC DEVICE.**—The term “photovoltaic device” means a device that converts light directly into electricity through a solid-state, semiconductor process.

(c) **APPLICABILITY.**—The requirements of this section shall not apply to photovoltaic devices placed in service prior to 180 days after the date of the enactment of this Act.

**SA 3906.** Mr. WARNOCK submitted an amendment intended to be proposed to amendment SA 3867 submitted by Mr. REED and intended to be proposed to the bill H.R. 4350, to authorize appropriations for fiscal year 2022 for military activities of the Department of Defense, for military construction, and for defense activities of the Department of Energy, to prescribe military personnel strengths for such fiscal year, and for other purposes; which was ordered to lie on the table; as follows:

At the end of subtitle E of title III, add the following:

**SEC. 376. REPORT ON INITIATIVES OF DEPARTMENT OF DEFENSE TO SOURCE LOCALLY AND REGIONALLY PRODUCED FOODS FOR INSTALLATIONS OF THE DEPARTMENT.**

(a) **IN GENERAL.**—Not later than one year after the date of the enactment of this Act, the Comptroller General of the United States shall submit to the appropriate committees of Congress a report detailing—

(1) efforts by the Department of Defense to establish and strengthen “farm to base” initiatives to source locally and regionally produced foods for consumption or distribution at installations of the Department;

(2) efforts by the Department to collaborate with relevant Federal agencies, including the Department of Veterans Affairs and the Department of Agriculture, in efforts to procure locally and regionally produced foods;

(3) current procurement practices of the Department of Defense regarding food for consumption or distribution on installations of the Department;

(4) opportunities where procurement of locally and regionally produced foods would be beneficial to members of the Armed Forces, their families, military readiness by improving health outcomes, and farmers near installations of the Department;

(5) barriers currently preventing the Department from increasing procurement of locally and regionally produced foods or preventing farmers from partnering with nearby installations of the Department; and

(6) recommendations for how the Department can improve procurement practices to increase offerings of locally and regionally produced foods.

(b) **APPROPRIATE COMMITTEES OF CONGRESS DEFINED.**—In this section, the term “appropriate committees of Congress” means—

(1) the Committee on Armed Services and the Committee on Agriculture, Nutrition, and Forestry of the Senate; and

(2) the Committee on Armed Services and the Committee on Agriculture of the House of Representatives.

**SA 3907.** Mr. WARNOCK (for himself and Mrs. BLACKBURN) submitted an amendment intended to be proposed to amendment SA 3867 submitted by Mr. REED and intended to be proposed to the bill H.R. 4350, to authorize appropriations for fiscal year 2022 for military activities of the Department of

Defense, for military construction, and for defense activities of the Department of Energy, to prescribe military personnel strengths for such fiscal year, and for other purposes; which was ordered to lie on the table; as follows:

At the end of subtitle E of title VIII, insert the following:

**SEC. 857. REPORT ON EFFECTS OF SEMICONDUCTOR CHIP SHORTAGE.**

(a) **IN GENERAL.**—Not later than one year after the date of the enactment of this Act, the Secretary of Defense, in consultation with the Secretary of Commerce, shall submit to the appropriate congressional committees a report on the effects of the semiconductor chip shortage on the national and economic security of the United States, including the effects of the shortage on—

(1) current defense acquisition programs; and

(2) the ability of current and future defense acquisition programs—

(A) to use state-of-the-art semiconductor capabilities; and

(B) to incorporate state-of-the-art artificial intelligence capabilities.

(b) **FORM OF REPORT.**—The report required by subsection (a) shall be submitted in unclassified form, but may include a classified annex.

(c) **APPROPRIATE CONGRESSIONAL COMMITTEES DEFINED.**—In this section, the term “appropriate congressional committees” means—

(1) the Committee on Armed Services and the Committee on Commerce, Science, and Transportation of the Senate; and

(2) the Committee on Armed Services and the Committee on Energy and Commerce of the House of Representatives.

**SA 3908.** Mr. WARNOCK (for himself and Mr. BOOZMAN) submitted an amendment intended to be proposed to amendment SA 3867 submitted by Mr. REED and intended to be proposed to the bill H.R. 4350, to authorize appropriations for fiscal year 2022 for military activities of the Department of Defense, for military construction, and for defense activities of the Department of Energy, to prescribe military personnel strengths for such fiscal year, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place in title X, insert the following:

**SEC. 10 . PRESERVATION OF MEMORIALS TO CHAPLAINS ON CHAPLAINS HILL AT ARLINGTON NATIONAL CEMETERY.**

(a) **UPDATES TO MEMORIALS.**—The National Conference on Ministry to the Armed Forces, or any successor organization recognized in law for purposes of this section, may, at no cost to the Federal Government—

(1)(A) update the memorial to Protestant chaplains located in Arlington National Cemetery, Virginia, with a granite, marble, or other stone base to host the bronze plaque of the memorial;

(B) add an additional plaque to such base that includes the name of each chaplain, verified as described in subsection (b), who died while on active duty since the original memorial was placed; and

(C) make such other updates and corrections to the memorial as may from time to time be needed as determined by the National Conference on Ministry to the Armed Forces or such successor organization; and

(2) make such updates and corrections to the memorial to Catholic chaplains and the memorial to Jewish chaplains located in Arlington National Cemetery as may from time